



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,962	10/19/2001	John Francis Dufort	32414.24.1	2216
22859 75	590 03/15/2004		EXAM	INER
INTELLECTUAL PROPERTY GROUP			MASINICK, MICHAEL D	
FREDRIKSON 4000 PILLSBU	& BYRON, P.A.		ART UNIT	PAPER NUMBER
200 SOUTH SI			2125	10
MINNEAPOLI	S, MN 55402		DATE MAILED: 03/15/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

							
,	Application No.	Applicant(s)	al				
Office Action Summany	09/806,962	DUFORT, JOHN I	FRANCIS				
Office Action Summary	Examiner	Art Unit					
	Michael D Masinick	2125					
Th MAILING DATE of this communication app ars on the cover shet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠ Responsive to communication(s) filed on <u>05 M</u>	arch 2004.						
	action is non-final.		:				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under E	•	• •	•				
Disposition of Claims							
	antiantian		•				
4) Claim(s) 32 and 36-51 is/are pending in the ap			:				
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>32 and 36-51</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
_ ·	_		:				
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119		·					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list	of the certified copies not red	ceived.	·				
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Infor 6) Other:	mal Patent Application (PTC)-152)				
I S Patent and Trademark Office			. 				

Art Unit: 2125

DETAILED ACTION

Applicant's arguments regarding the finality of the previous rejection are found to be persuasive and the finality of that rejection has been removed. The current action is being properly made final.

Applicants arguments with regards to the rejections themselves are found to be non-persuasive for the reasons below.

Since no art rejections have been argued in the response to the office action, the only outstanding issue with this application is whether the Shek Affidavits (viewed as a whole) can properly be considered "public use" and therefor qualify as rejection art under 35 USC § 102.

Applicant argues that Shek had knowledge of the method as claimed, but did not publicly use such a method. The Shek affidavits clearly show the method of making these lithophanes using a computer and in the same method as is claimed. This occurred in 1993.

In order to qualify for a U.S. Patent, a person (or group of people) must be the original inventor(s). Applicant argues that Shek may or may not have been the original inventor. This is true, but the real issue involved is that the **applicant is NOT** the original inventor.

For argument, assume Shek was the original inventor. Applicant is not entitled to a patent because they are not the original inventor of the method of making lithophanes as claimed. Now assume Shek is not the original inventor. Shek's affidavit clearly shows the use of manufacturing and computer equipment in the method as claimed to create lithophanes. Since Shek is assumed to not be the original inventor, this qualifies as public use by someone other than the original inventor.

Art Unit: 2125

All Rejections stand as previously written.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 32, 36-42, 48 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Affidavits signed by Alexander Shek.
- 3. The Shek affidavit shows a method of forming a plastics article through which an image is observable when the article is illuminated with light from behind due to variations in the thickness of the material of the article corresponding to variations in intensity of the image to be observed, the method comprising the steps of: determining the relative intensity at different points of an image, converting the determined relative intensity into data for controlling a mould forming machine; automatically forming a mould in which the relief on the mould surface corresponds to the determined relative intensity, and moulding the article in the mould, the article being moulded from translucent plastics material including a pigmentation.
- 4. Referring to claim 36, Shek shows where the article has thicker portions corresponding to the darker regions of the original image, and thinner portions corresponding to the lighter regions of the original image.

Page 3

Art Unit: 2125

5. Referring to claim 37, Shek shows where the relative intensities of the different points of the original image is determined by scanning the image into a computer.

- 6. Referring to claim 38, Shek shows where the image is analyzed by dividing this into separate picture elements, and determining the intensity of each picture element. Examiner notes that this concept is inherent to modern computer scanners by saving pictures as rows of pixels where each pixel has a color value and intensity associated with it.
- 7. Referring to claim 39, Fuller shows where a value corresponding to the intensity of each picture element is stored in memory (Inherent to any computer scanning system).
- 8. Referring to claim 40, Shek shows where the mould is formed of metal.
- 9. Referring to claim 41, Shek shows where the step of forming the mould is an engraving step.
- 10. Referring to claim 42, Shek shows where the engraving step is achieved using a numerically controlled engraving machine.
- 11. Referring to claim 48, Shek shows where the article is a non-flat article.

Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Shek Affidavits as shown above in view of U.S. Patent No. 5,925,500 to Yang et al.

Art Unit: 2125

- 14. Shek does not show where the engraving step is laser engraving.
- 15. Laser engraving is well known in the art as being a quick way to easily remove small amounts of a material.
- 16. Yang et al shows the use of laser engraving to create printing plates (Column 1).
- 17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the laser engraving method of Yang to produce the engraved lithophane articles of Shek because printing plate consists of virtually the same three dimensional pattern as a lithophane, and according to Column 1, lines 35-38 of Yang, "Such plates offer... durability and ease with which they can be made".
- 18. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Shek Affidavits in view of US Patent No. 5,116,533 to Grandmont et al.
- 19. Shek does not show the use of a luminescent particles or providing a luminescent layer on or in the article.
- 20. Grandmont shows a moldable wax based marker containing phosphorescent particles.
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the phosphorescent particles of Grandmont in the article created by the method of Shek because (as taken from Grandmont Col 1, lines 14-21) "It has long been recognized that the appeal of certain toys can be enhanced by imparting phosphorescent properties to the various elements thereof."

- 22. Claim 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Shek Affidavit to Herman Fuller in view of US Patent No. 5,503,583 to Hippely et al.
- 23. Shek does not show the creation of lithophanes with a heat sensitive material whose light transmissive properties vary dependant upon the temperature of the material or a color layer.
- 24. The use of thermochromic materials is well known. Hippely shows a child's toy painted with a thermochromic paint in order to provide various patterns, designs, letters, and numbers according to differing temperatures.
- 25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the thermochromic temperature sensitive materials of Hippely in the lithophane article creation method of Shek because children are entertained by color changes as shown in Hippely Col 1, line 50 Col 2, line 5.
- 26. Claims 49-51 are rejected for the same reasons as the claims they are based upon.

Conclusion

27. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2125

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

Page 7

date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure and to the state of the art at the time of invention.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael D Masinick whose telephone number is (703) 305-7738.

The examiner can normally be reached on Mon-Fri, 7:30-4:00. Examiner can also be reached

quickly via email at Michael.Masinick@uspto.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Leo Picard can be reached on (703) 308-0538. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 746-7239 for regular

communications and (703) 746-7239 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

L-P. Punt

mdm

March 11, 2004

LEO PICARD SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100